Challenges and Successes of Portal Implementation for a Small Gas Utility

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Overview:

- Introductions
- Geospatial Overview
- OGC
  - Background
  - GIS Mandate
- GIS development
  - Data
  - Utilization
  - Demonstration
  - Lessons learned
  - Benefits
- Q&A
Ohio Gas Company (OGC)

- Northwest Ohio
- Incorporated in 1914
- Just under 100 employees
- 50K customers
• 100+ years of survey/geospatial expertise
• Long term Esri business partner (ArcIMS through AGOL/Enterprise)
• Data collection through visualization
• GIS experience in multiple markets
Importance of mobile / field understanding...

Gas assets:

...Exist in the "real world"
...Have a "known" x/y
...Are impacted by environmental conditions

Additionally, staff:

...Must travel to these sites (often remote)
...Encounter a varied of field concerns
...Typically do NOT have full "office" data access
Importance of mobile / field understanding...

Why not manage/maintain geospatially?

Starting to see a shift away from traditional methods... (tabular based)

...Or at a minimum, a tighter integration of tabular data and geospatial data
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Technologies are helping streamline field-to-office and office-to-field communication
GIS Mandate

- GIS RFP:
  - Woolpert, ARC Document Solutions
- Data Conversion:
  - Paper Maps
  - CAD
  - Service/tap cards
- Data visualization & analysis
  - Esri:
    - ArcMap, ArcPro
    - ArcGIS Enterprise (Portal)
    - Collector, Survey123
  - ARC: Skysite
Age Old Data Conversion

- Lots of tabular and geospatial data (cad, paper, db's)
- Utilize public data
- Use of services for QA/QC and clarification
GIS Integration:

- Good geospatial framework is being created, but how to integrate into operations?
- Let's get existing field staff involved!

**Q: External or Internal Resources?**  
A: "Mostly" Internal

**Q: Data Logger Hardware? (phone, tablet, etc.)**  
A: Android Tablets

**Q: GPS Hardware? (interior, external, accuracies)**  
A: Combination of Internal & External (Bad Elf, Trimble)

**Q: Training? (who?, how much?)**  
A: 1-2 weeks for key staff, limited consultant support
GIS / Mobile GIS

- Field data access
- "Constant" connectivity
- Efficiencies
- Streamline field tasks
- Safety
- Intelligent decision making
Demonstration

- Live data review
- 20,000 data points (with images)
- 6 months time
- limited staff
Lessons Learned (+)

- "Instant" data access
- Utilize existing staff
- Rapid data build out
- Situational Awareness
- Tracking:
  - Of staff
  - Of progress
- Single data source

Lessons Learned (-)

- Geospatial accuracy?
- Employee acceptance
- Picking the right hardware
- Determining the correct workflow
  - Field
  - Office
Overarching Benefits

• Situational Awareness
• Maximize on site staff
• Minimize travel
• Minimize risk
• Increase safety
• Solid asset/infrastructure framework

Moving Forward

• Utilize interns to update missing attribute data
• Integration of geospatial data with billing software
• Integration of geospatial data with work order management

Technology, industry, and software advancements...

...Full field to office capabilities.
Q & A

Thanks for your time!

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